

Government-led monitoring for sustained water service delivery



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Position paper 3 of 5

Position Paper 3: Government-led monitoring for sustained water service delivery

Featured Ideas.

When considering how to improve and sustain water service delivery systems, it is important to take into account the following:

- Improved monitoring is critical to increased reliability of water service delivery.
- Current government-led monitoring efforts in Ethiopia are fragmented and inconsistent across sectors and needed data is not getting to water service providers and service authorities.
- Monitoring systems are far more complex than just data collection, and a focus needs to be on operationalizing and institutionalizing the systems and processes to support ongoing data use and evidence-based decision making.
- Different monitoring systems by different actors may be helpful due to different data needs and to support the importance of engaging in healthy debate about data validity and use.



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Introduction.

Background on Government-led Monitoring

The purpose of monitoring is to enable effective decision-making using continuous, reliable, and relevant data. This data can then be processed, analysed and used to inform decisions. Monitoring efforts have the potential to track interventions, inform corrective actions, guide planning and resource allocation, and increase accountability to citizens for service providers and authorities. They may also guide regulation of services and service providers. While NGOs, the private sector and others can support monitoring efforts or collect data for their own decision-making, governments in most countries are charged with monitoring functions and, as the ongoing local entity, it is critical to have strong government-led monitoring systems.

Monitoring requires coordination mechanisms, strong institutions and governance, analytical capacity, and regulatory and accountability mechanisms that put data to use. Information must be available and presented as insights, which support planning and budgeting cycles and inform financial investments. Monitoring should also respond to and satisfy the needs of various stakeholders and support coherent accountability and sector performance management frameworks. Ultimately, monitoring should result in greater sustainability of water, sanitation and hygiene (WASH) service delivery¹.

This position paper presents and discusses WASH sector monitoring in Ethiopia. It highlights recent experiences designed to improve monitoring capacities, processes and systems and outlines opportunities and recommendations for monitoring strengthening activities.

The Role of Development Partners to Support Government Monitoring

Country-led monitoring refers to the multi-stakeholder mechanisms for monitoring, evaluation, and learning that are led by a country government rather than a third party². One popular definition suggests country-led monitoring is where the country leads — and owns — the monitoring cycle by determining the questions to be asked, the methods to be applied, the analytical approach to be established, the communications protocol to be followed, and, eventually, the actual information usage³.

The term “country-led” is also used to reflect the shared civil society, private sector, and government leadership roles in the process. Country-led monitoring encompasses an entire country and includes rural, small-town, and urban areas, as well as referencing quantitative and qualitative data about services. Country-led monitoring requires that a dedicated government institution leads, with clear involvement of civil society organizations, local government, and donors⁴. In this scenario, the government coordinates regular updating, ensures availability, and encourages data use.

Building strong monitoring systems occurs within the paradigm of country-led monitoring through a participatory process. This process sets aspirations for the system, then determines an approach and actions for building systems which deliver on the country’s information needs. Priority steps for establishing country-led monitoring are set below in Table 1 for each of the main stakeholder groups.

Table 1 – Roles and Responsibilities for Establishing Country-led Monitoring

Government	Approach recent and current development partners to elaborate on and communicate support for strengthening the WASH monitoring and evaluation system. This is based on a participatory country-led monitoring approach with a costed action plan developed.
Development partners	Invest in line with country-led monitoring, be responsive to government requirements, and support costed plans for country-led monitoring. This includes strengthening the enabling environment, ensuring routine monitoring and evaluation, and applying insights in sector reviews.
Civil society	Call for transparent information on the performance of services and institutions regarding accountability to constituents, users, and civil society.

WASH Monitoring in Ethiopia

The existing WASH landscape is fragmented and complex, with numerous programs, plans, financing channels, and reports at work across the sectors. Table 2 summarizes the key monitoring reporting processes within the main WASH implementing sectors in Ethiopia. Monitoring and evaluation (M&E) responsibilities and efforts are typically fragmented, even within government. Integrated WASH monitoring through combined data collection processes is a fairly recent development, seen in the National WASH Inventory of 2010-2011. To date, there have only been occasional integrated reporting efforts. These have remained largely at the federal level and have not been fully successful or sustained. Likewise, a comprehensive annual sector report remains a major gap⁵.

The existing national monitoring system in Ethiopia has been established with the aim to track national progress against key performance indicators. At the time of writing, a new Management Information System (MIS) is being launched to support this task. While such monitoring supports policy making and planning, different monitoring processes are required to support operational processes for service providers and the service authorities who provide support. Subsequently, Ethiopian WASH sector stakeholders have separately developed a range of alternative processes and systems for their specific needs at the district, regional and national levels.

Cooperation between the units managing information systems across WASH ministries and alignment of data from the different systems across the WASH sectors is currently limited. This hampers efforts to produce comprehensive WASH reporting. Ministries do not yet cooperate sufficiently to ensure data sets are complementary, without overlap and available for timely sharing.

In 2010-2011 the Ministry of Water, Irrigation and Electricity (MoWIE) led the first national assessment of water supply systems in Ethiopia. While this is a significant achievement, and data was used to inform Ethiopia's achievement of the Millennium Development Goal for water, results were not fully verified or integrated with the district (woreda)⁶ or regional government systems. The data has never been fully updated and only limited use of data has been possible. The MoWIE undertook the National WASH Inventory 2 in early 2019.

Table 2 – Key Monitoring Reporting Processes Within Main WASH Implementing Sectors⁷

Processes	Water	Health	Education	Integrated WASH
Data collection (and reporting frequency)	Critical coverage and functionality indicators are calculated based upon data that is reported by district water offices and urban water supply utilities. Quarterly reporting processes are extensive but based upon standard indicators and variable definitions.	Data is collected frequently (e.g., monthly, quarterly, and annually) by health extension workers and reported through health centres to districts.	Data is collected annually, from all schools under the supervision of school cluster supervisors.	Not routine. Major, recent examples of integrated data collection were National WASH Inventory (NWI) 2010-2011 and from regions through standard formats for the Consolidated WASH Account annual report.
Data processing	Generally done manually with desktop software (e.g., Microsoft Excel).	Managed by diploma-holding expert at the district level who transcribes paper-based submissions and generates compact disks with results. Their technology is regulated to prevent viruses and reduce maintenance requirements.	Regions aggregate results from paper forms using Excel and submit these to the Ministry of Education (MoE) who manages the data in a Microsoft Access database.	NWI data was entered into a custom-made Access database, with analysis performed in Excel. Some data from 2010 has been imported into the WASH Monitoring and Evaluation (M&E) Management Information System (MIS) by Professionals Unite Together (organization that developed the MIS).
MIS/ analysis	Rural and urban water supply is included in WASH M&E MIS but is not yet operational. Excel remains the standard tool for analysis.	Health MIS only allows calculations for the limited set of indicators included.	Education MIS data is analysed on an annual basis.	WASH M&E MIS is not yet operational but is undergoing implementation.
Reporting	Annual reports are prepared by the Planning Department and by the Water Supply and Sanitation Directorate for various donor projects and programs. Reports are disseminated in sector meetings such as the Multi-Stakeholder Forum.	Ministry of Health (MoH) publishes Health MIS indicator results on an annual basis in its annual performance report. However, the key sanitation indicators are not yet included.	An Education Statistics Annual Abstract is produced. A new National School WASH Strategy and Guideline is expected to improve reporting.	The first One WASH National Program-Consolidated WASH Account report was prepared in August 2015. However, this was only integrated at federal level and does not cover the whole country. Integrated reporting is not yet underway at regional or district levels.

Principles for supporting government-led monitoring.

The following twenty principles were initially developed by IRC WASH to guide the design, development, support and strengthening of Ethiopia's WASH M&E MIS in 2015. While this list was previously unpublished, the principles remain relevant today.

1. Monitoring is a means to an end. Monitoring must always have a clear purpose. Many sector professionals are seduced by the fast developments in information and communications technology (ICT) to build big and all-encompassing data management systems, but these are underutilized. Monitoring must be 'fit for purpose'.
2. Monitoring should provide the data that professionals and executives need to make decisions, to plan, and to allocate budgets. Effective and sustainable monitoring systems should produce the data without which sector professionals and executives could not do their jobs.
3. It is important to accept that different monitoring systems are needed and could interact or operate in parallel. Private operators will need different data than government ministries, development partners need different data than governments, and so on. All have unique interests and, therefore, their own data needs. The best monitoring environment is where monitoring is done by different stakeholders and these parties can use data to discuss, challenge and negotiate.
4. Data collection is not only a technical exercise of putting data into a smartphone or on paper. Data collection helps sector professionals build rapport with communities, get a proper understanding of problems and faults and create ownership around problem solving. As much as possible, data collection should not be done not enumerators, but by local WASH sector professionals responsible for planning and implementation of WASH services.
5. Data needs to be filed and stored where data are needed - from the local level to national ministries - where sector professionals make decisions. Accessible data helps sector professionals and executives see trends and changes over time.
6. Trust is needed for well-functioning monitoring and management information systems. Trust must extend to data quality and reliability. Also, trust needs to exist that different users of the same monitoring system do indeed use the data. National ministry staff should not check the functionality of water points, for example, but trust that this will be done by professionals at the local level. For suitable management information systems, accountability needs to be defined and respected at different levels.

[Continued - 2 of 3]

7. Sustainable monitoring systems demand a range of skills. These extend beyond just data collection to data analysis and reporting. Some of the skills need to be vested in WASH sector professionals, but some of these skills require data management specialists.
8. A performance monitoring system needs continuous piloting. Technology changes fast, WASH governance changes fast, and data requirements will change fast. Even a well-functioning monitoring system needs space for experimentation and testing.
9. Management information systems and the sector itself will change continuously. A well-performing monitoring system needs continuous training facilities.
10. Buying, using or leasing ICT for monitoring requires a business-minded approach. Good contracts that give the client access to all data and source codes should be in place, as should help desk functions and regular updates and upgrades. As well, there should be a consistent assessment of ongoing contracts and establishment of clear procurement rules. Too often, ICT services are provided in aid-driven environments creating faulty expectations and disappointment.
11. Monitoring has a political element with biases tending towards the interests of those managing the data. This is why parallel monitoring systems that serve the interests of different stakeholders are important. Contestation over the truth is actually a sign of a mature sector; one in which all stakeholders have the right to speak, respect one another's opinions and can dispute one another's data.
12. National statistical offices are crucial for independently measuring impact of WASH services delivery. Most administrative and provider data systems serve planning and financing purposes. These systems are designed to help service providers and authorities deliver proper services. Statistical offices are important to independently measure the impact of service delivery and make that data available.
13. The WASH sector is integrated, however, in most countries, there are no WASH ministries. WASH is often spread over different ministries: water, health, education, finance and more. Data collection is then also spread over different ministries. WASH monitoring systems should draw on these systems and consolidate data into a single WASH report.

[Continued – 3 of 3]

14. Sustainable monitoring systems require incentives to collect and use data, particularly at local levels. For example, data collection and applying data in annual planning may be a prerequisite for receiving grants from the national level.
15. Because the timelines and levels of data collection, validation and use are interconnected, every monitoring system needs a calendar of activities. MIS units are suited to enforce such organization and activity planning.
16. Monitoring is generally not well-liked at the local level. The preference is for action or “fixing things.” Making monitoring attractive is critical and begins with ensuring that local level professionals own the data. Incentivizing repeated data collection is also helpful.
17. Mature M&E systems require time and continual reflection. For example, the Government of Uganda required 15 years to build a national sector monitoring system. This system started at a basic level and evolved over time to reflect the reality of in-country contexts. It grew to better serve data needs and integrated new technology options. These included adding new targets, improving indicators’ definition precision, improving data collection methods and upgrading performance monitoring to target monitoring efforts.
18. Timely reporting and data reliability are more important than the size of data systems. It is better to have fewer indicators reported timely and with quality, than to have sizable data that is underreported and of dubious worth.
19. Independent research is always needed on top of monitoring and management information systems. Research to investigate why the data show problems is particularly important. By example, this is what the GLAAS reports add to the Joint Monitoring Program data at the international level.
20. Monitoring systems reveal problems and constraints. The question is: will governments and stakeholders act on the problems revealed? Do they have the skills and the resources to correct, repair, rehabilitate, re-train, and re-raise awareness? If there is no mechanism or provision for action, then monitoring will lose momentum.

Existing Monitoring in Amhara.

Major Findings from the Participatory Monitoring Assessment

The Millennium Water Alliance (MWA) monitoring assessment in the Amhara National Regional State (ANRS) applied an organizing framework⁸ for evaluating WASH sector M&E systems in three districts, two zones and the Amhara Regional Water Bureau (RWB). The organizing framework provides two key items. The first, a description of the components of a functional national WASH M&E system. The second, benchmarks against which to assess system establishment progress. The framework provides insights into the current status of monitoring and displays opportunities for strengthening the core components of the districts M&E system.

Components and benchmarks are grouped into the following three categories; **the enabling environment** (people, processes and planning), **M&E activities** (collecting, verifying and analyzing data), and **insights** (using data for decision-making).

The Enabling Environment: People, Partnerships, and Planning

A formalized structure guided by mandates of the Ministry of Water, Irrigation and Electricity down to Regional Bureaus, Zonal Offices, District Water Offices, and Kebeles (villages) has guided the implementation of M&E practices in the ANRS more strongly than the detailed processes provided in the WASH M&E guidelines. To strengthen monitoring overall, stakeholders involved in tracking and achieving WASH goals should also incorporate more of the processes provided in the WASH M&E guidelines.

The district collects data and communicates results to the zone, which aggregates and reports to the regional level. At region and zonal levels there is a Planning, Monitoring, and Evaluation (PME) team. These members require stronger technical skills, improved employment conditions and more attention from management to ensure the positions are filled according to the job description. Despite high turnover rates, new hires rarely receive formal training. There are no formal mentoring processes and on-the-job training is mostly informal, delivered in small networks. As well, there is no nationally endorsed M&E curriculum. Some M&E university courses have been established and may provide an opportunity to improve the skills of the workforce.

Coordination of M&E at each level takes place through strong government leadership. Wider stakeholder participation, however, is focused at the regional level rather than in districts. This may limit the role of data in local decision making. At both the regional and district levels there are similar coordination platforms:

- The WASH Technical Committee. It meets quarterly with other departments including health, education, water and finance to discuss, update and review the regional or district plan.
- The WASH Steering Committee. It meets with WASH stakeholders every quarter and, while M&E coordination at zonal level is minimal, it could play a role in strengthening M&E sector coordination.

Annual workplans with costed activities are developed and updated each year by institutions at all levels. The zones and districts use standardized formats for the plan and budget. These formats are constructed and updated by the Regional Bureau. The workplans are to align with indicators from the national level, although districts, zones and regions collect, report, and use more detailed indicators than are required.

Over half of the District WASH team staff time is spent directly on data collection related to monitoring and supervision. Planning and technical support times may even include aspects of data monitoring, increasing the purported time commitment even more. Despite this, there has been little budget for rehabilitation or maintenance of water infrastructure. Without budget, the impact of routine monitoring may remain inconsequential. Incentives should be introduced to ensure that there is a clear framework for tracking services and planning corrective actions to improve water point functionality.

A culture of communication and advocacy is needed behind WASH M&E. When addressed, there will be improvement around routine monitoring and data or information product communication back to the district and kebele levels. As well, finding and retaining skilled M&E staff requires improvement in career progression possibilities, as well as employment conditions and position statuses.

M&E Activities: Collecting, Verifying, and Analyzing Data

While data collection occurs at the district level, there is also a reporting structure that guides participant responsibilities from district to zone and from zone to region. At each level, data gets aggregated, consolidated, and reported – ideally, in compliance with required formats. A shortage of equipment and supplies can impact data quality and collection regularity. The District Water Offices are often not able to fulfil all monitoring responsibilities, caused by a shortage of equipment and supplies. Quality and regularity of data collection and reporting can suffer due to these shortages. The required budget for M&E activities needs to be reviewed and updated to ensure that district costs for per diems, fuel, travel supplies, vehicles, mobile and GPS devices, office furniture, and hardware are adequately covered.

Once routine monitoring is established there needs to be ongoing, supportive supervision, and data auditing to ensure data quality and performance management. Supervision activities are currently provided in accordance with the roles and responsibilities guided by the national structure. At the national level there are no detailed guidelines for supportive supervision, only checklists are available to the zonal and regional levels. The activities that should comprise supportive supervision are planned quarterly, per the national framework. These are scheduled and budgeted in the zonal and regional annual workplan. More expansive guidelines for supportive supervision by the zone and the regional Bureau should be developed to ensure regular and effective support. Any support to zone, district, and kebele should include a mechanism to perform data audits as there is currently no auditing practice in place. Currently, data are minimally checked and only when they are received from the institutional level below.

The District Water Offices are involved in project-based surveys and tools, but these surveys are not integrated into the government monitoring framework. The institutions at district, zonal and regional levels have expressed little knowledge about current or planned national and sub-national surveys. In part, this is because there is no easily accessible national database for WASH related surveys.

Any data management happens in rudimentary form with paper filings and simplistic digital file management. Currently, there are no guidelines for information management being applied to digital file storage. In the water supply sector, there are no active posts (at the time of writing) for database managers or other IT personnel, suggesting information management up-leveling is not a near term priority. Information management and skilled technology personnel are pivotal for effective WASH M&E. It is advised to review the staffing requirement for all institutions and develop new regional guidelines.

Insights: Using Data for Decision-Making

Data is used to inform reporting requirements and for planning purposes, especially related to construction. There is little capacity at the district level to act on the collected data, therefore the district and kebele levels should be trained on using data for improving service delivery. In addition, gaps in routine monitoring — especially for hard-to-reach kebeles — have implications on data quality and its use in decision making.

Communicating clearly about the way data is used is an important part of validating monitoring and decision making. Unfortunately, collated data and information reports are not being shared at the kebele, district and zonal levels. A detailed plan should link data needs to data collection efforts and combine these in information reports complete with a timetable for routine dissemination to the zones, districts, and kebeles.

Aside from a few checklists at zone level, there are no formal guidelines or processes describing how data should and could be used outside of planning new scheme construction. Any existing project-based practices, regardless of how informal, should be documented and shared at the regional level. These will have the express purpose of establishing formal operating guidelines for each level. Ideally, planning and budgeting processes should be adjusted with focus put on using routine monitoring data that captures the state of WASH services.

Further findings on data use come from a recent study on the use of monitoring data for informing evidence-based decision-making in Ethiopia⁹. The study applies a factor analysis to determine which factors most positively influence the use of monitoring data in decision making. The research has found the strongest contributors to be: interest, incentives, institutional capacity, and individual capacity. The findings conclude that to increase data use we should prioritize addressing these issues and not on improving data characteristics such as data collection, processing or storage systems.

Recommendations.

Establish a vision. Focus districts have the tools, capacity and insights — informed by regular and reliable data — to make evidence-based decisions for improving and sustaining water service delivery.

Set an objective. Pilot improved monitoring systems that provide necessary data from community water, sanitation and hygiene committees to service authorities, associations, utilities and the private sector, while enabling the government to exercise oversight and monitor performance.

To address specific needs at the district level in the Amhara Region, MWA partners will address the critical recommendations from the MWA monitoring assessment show in Table 3.

Table 3: Recommendations for Strengthening Monitoring in Amhara

Recommendations from the MWA Monitoring Assessment	
The enabling environment: people, partnerships and planning	<ul style="list-style-type: none"> • M&E staffing capacity at the regional level needs to be reviewed to ensure monitoring and information management competencies exist at the district and zonal levels. • Evaluate the regional and district level M&E framework and guidelines in terms of the specific indicators, targets and monitoring activities.
M&E activities: collecting, verifying, and analysing data	<ul style="list-style-type: none"> • Develop routine monitoring guidelines beyond supervision of the construction or rehabilitation of infrastructure and project-based monitoring. • Develop guidelines and support for setting up an effective practice of supportive supervision and data audits. • Develop kebele level monitoring in line with the health and education sectors. • Review district and zonal office budget for equipment and supply line items. • Establish information management guidelines to ensure the efficient storage of digital reports and inventories in accessible formats.
Insights: using data for decision-making	<ul style="list-style-type: none"> • Provide support, guidance, and capacity at the district and zonal levels for the generation of insights from data. Ultimately to improve water services through corrective actions. • Coordinate and learn from the use of data by other sectors at the district level, such as the health, education, and sanitation sectors. • Strengthen coordination between sub-national levels level (e.g., participation in committees and dissemination of reports and feedback to strengthen supportive supervision). • Ensure that sub-national offices receive routine data and information products from higher institutional levels for data use and validation purposes. • Review career possibilities and progression paths, employment conditions, and the status of M&E staff in the sector. This helps ensure that they attract and retain appropriately skilled personnel, who can generate insights from data.

MWA's approach is to build on what already exists and works, while making incremental improvements. We recognize the tools are exciting but have learned that the hard work is to operationalize and institutionalize the systems and processes required for a sustained, functional monitoring system. Along with the principles outlined in this paper, MWA partners have built conviction around other essential government-led monitoring aspects:

- Institutionalizing system processes
- Ensuring dedicated staff for operating the system
- Establishing district and regional budgets for monitoring
- Focusing on data quality, including verification and validation of results
- Maintaining continuous updating
- Setting up mechanisms for reporting new water points
- Sharing results across government departments and partners.

About.

The Millennium Water Alliance (MWA) is a permanent coalition of leading humanitarian and private organizations that convenes, integrates, and influences critical players in the business, technology, government and NGO sectors to supply clean, safe drinking water and sanitation to millions of the world's poorest people in Africa, Asia, and Latin America. Founded in 2002, MWA tests, innovates and scales effective and sustainable solutions towards this goal. Learn more at www.mwawater.org.

In Ethiopia, MWA convened a group including: CARE, World Vision, Food for the Hungry, WaterAid, Catholic Relief Services, IRC WASH, the Centers for Disease Control and Prevention and Splash, to support the work of the Amhara National Regional State in achieving the WASH SDGs in three districts.

This position paper is the third in a series of related position papers. These papers can be found on the MWA website. Other papers address issues including financing, long-term strategic WASH planning, and capacity. This paper aims to summarize the agreed thinking of the alliance on how Ethiopia can improve its monitoring of WASH service delivery to achieve the global SDGs. It was approved by the following members in January 2019 for publication: CARE, Catholic Relief Services, Food for the Hungry, IRC WASH, WaterAid, and World Vision.

The paper was drafted by Joseph Pearce (IRC WASH) with detailed review by John Butterworth (IRC WASH), Tedla Mulatu (MWA) and Laura Brunson (MWA). Additional contributions were received from Genene Abera (Catholic Relief Services), Gardachew Tiruneh (CARE), Manaye Siyoum (WaterAid), Lemesa Mekonta (IRC WASH), Mussie Tezazu (MWA), Etsegenet Hailu (Food for the Hungry), Teshale Dalecha (Food for the Hungry) and Nigussie Yisma (World Vision) during a meeting of MWA held on April 11, 2019.



Appendix:

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6. A woreda in Ethiopia is considered a district in most places; it is one of the smallest governing units in the country that is larger than a village.
7. Adapted; Hailu, et al. (2016).
8. The content of this document is a WASH adaptation of the UNAIDS Monitoring and Evaluation Reference Group guidance document called “Organizing Framework for a Functional National HIV Monitoring and Evaluation System” developed in 2008. A useful reference for readers interested in a non-sector specific toolkit adapted from the same UNAIDS MERG framework is the World Bank publication by Görgens and Kusek, “Making Monitoring and Evaluation Systems Work: A Capacity Development Tool Kit”. (2012).
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[Position paper 3 of 5]

